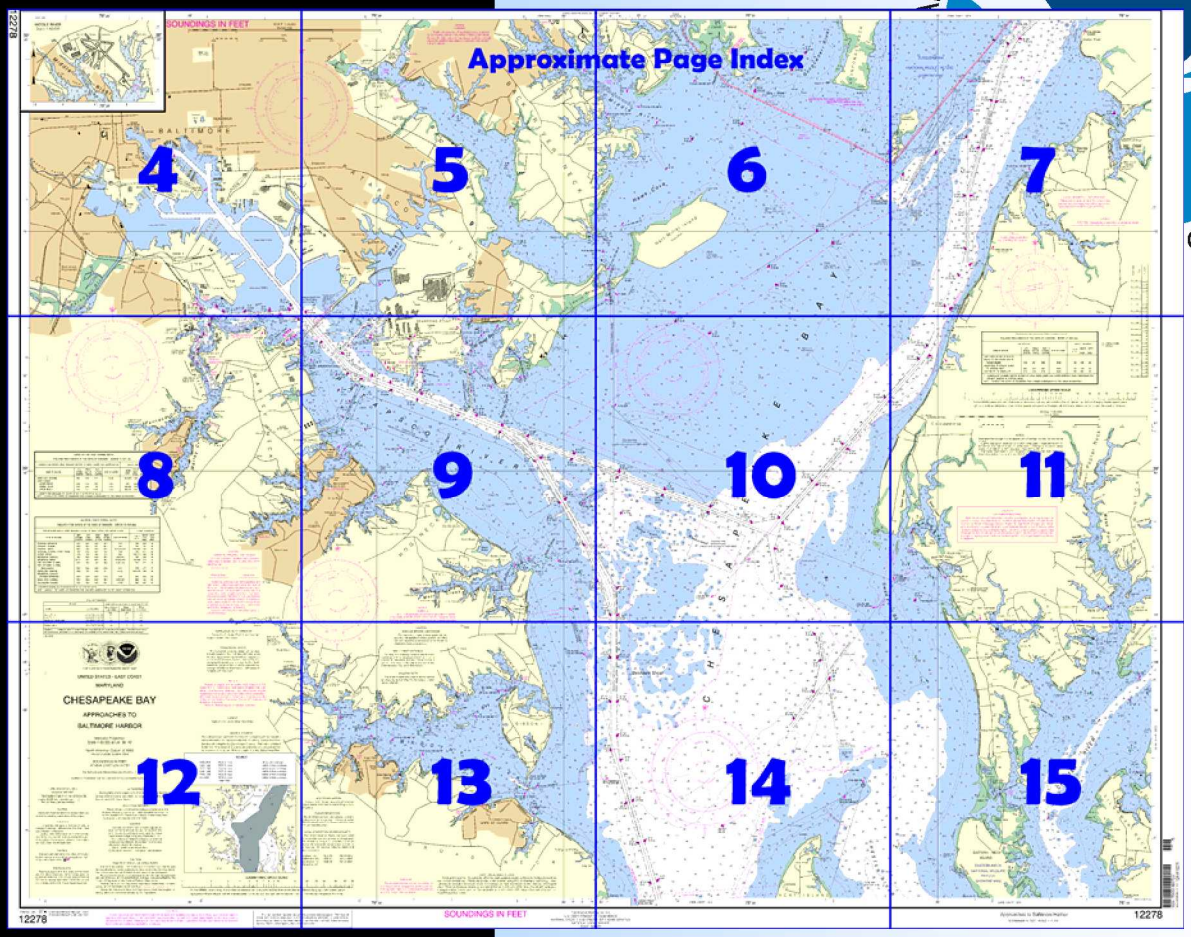
# BookletChart™

## Chesapeake Bay - Approaches to Baltimore Harbor

### (NOAA Chart 12278)


*A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.*

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*




*Home Edition (not for sale)*

*Published by the*
*National Oceanic and Atmospheric Administration*
*National Ocean Service*
*Office of Coast Survey*
*www.NauticalCharts.NOAA.gov*
*301-713-2770*

## What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

## What is a BookletChart™?

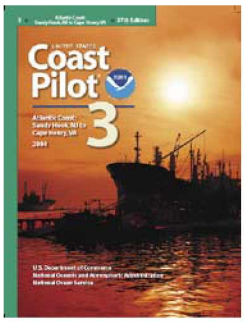
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

## Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.




### [Coast Pilot, Chapter 15 excerpts]

(13) **Bodkin Creek** has depths of 9 feet in the approaches and 7 to 9 feet into its branches. Shoaling to 3 feet is between Daybeacon 9 and Light 11.
(14) **Back Creek**. A boatyard is in the upper part. Gasoline and slips are available.
(15) **Main Creek** is separated from Back Creek by **Spit Neck.** Both branches have depths of 7 to 9 feet almost to their heads.
(16) **Graveyard Point**. Gasoline, diesel fuel, slips, and some marine supplies.
(21) **Rock Creek** has depths of 11 feet almost to the head. It is marked.
(22) **Wall Cove**; centerline depths of 10 feet for most of its length but shoaling to 5 feet near the head. The Maryland Yacht Club piers have depths of 13 feet.
(23) Wall Cove and Rock Creek; marine supplies, gasoline, diesel fuel, and water.
(24) **Stony Creek** has depths of 12 feet. The channel along the west side of the entrance is marked by a light and buoys; the east side is obstructed by rocks. A marina above the bridge has gasoline.
(25) **Nabbs Creek** has depths of 12 feet almost to the head. A marina near the head has gasoline, diesel fuel, berths, and marine supplies.
(26) **Back Cove** has depths of 12 feet to a boatyard. Gasoline is available.
(27) **Old Road Bay** has depths of 7 to 12 feet. A light marks a shoal that extends westward from North Point; a light 0.25 mile off the north shore marks a shoal that extends 0.5 mile from the west shore.
(28) **North Point Creek** and **Jones Creek** have depths of 4 to 6 feet. Approach by passing east of the light off the north shore. Small-craft facilities are in both creeks.
(143) A depth of 13 feet can be carried up Curtis Creek from Arundel Cove to the forks. **Furnace Creek** had depths of 11 feet for 0.8 mile, then shoals to 4 feet at the bridge; the bridge has a clearance of 8 feet. **Marley Creek** had a depth of 5 feet for 1.6 miles, thence 3½ feet to the bridge; the bridge has a clearance of 9 feet.
(167) **Tolchester Beach**; the depth was 6 feet in the channel; depths of 4 to 6 feet were in the basin. Gasoline, diesel fuel, marine supplies, and berths are available.
(168) **Fairlee Creek**. The buoyed entrance has depths of 6 feet. A marina with berthing facilities is inside the entrance; gasoline, diesel fuel, and marine supplies.
(170) **Worton Creek;** depths of 10 to 12 feet at the entrance and 7 feet inside for 1.4 miles. Good anchorage, protected from easterly winds in depths of 11 to 12 feet inside the entrance. A good, well-protected anchorage in depths of 6 to 9 feet is in the creek below Buck Neck Landing.
(171) **Green Point Wharf** has gasoline, berths, and marine supplies. **Buck Neck Landing** has gasoline, diesel fuel, and berthing facilities; marine supplies. The public bulkhead adjoining the fuel pier has depths of 6 feet.
(172) **Pooles Island** is a portion of Aberdeen Proving Ground constituting prohibited land areas and dangerous water areas. Landing is prohibited.
(178) The approach to the rivers between North Point and Pooles Island is through a buoyed side lane southwestward of Pooles Island Bar Light.
(179) **Hawk Cove** has depths of 8 to 11 feet and good anchorage.
(180) A passage leads to Hawk Cove; the depth was 3½ feet (5 feet at midchannel). The channel is marked by lights and daybeacons.
(181) **Back River** has depths of 7 to 4 feet for 6 miles to a bridge with a clearance of 16 feet. The channel, marked by buoys and daybeacons, is clear except for a 4-foot middle ground halfway between Hawk Cove and the bridge.
(182) There are small-craft facilities on both sides of Back River.
(183) **Middle River** is entered through a marked channel which leads to an anchorage basin at **Dark Head Creek;** the depth was 6.7 feet (9.4 feet at midchannel) to the anchorage basin; 9.4 feet in the basin. The west fork of Middle River has depths of 7 feet to within 0.5 mile of a bridge near the head.
(184) A 6 m.p.h. **speed limit** is enforced on Saturdays, Sundays and holidays.
(187) **Frog Mortar Creek** has depths of 6 to 8 feet. A 12-foot marked channel leads from Middle River to the seaplane basin on the west side above the entrance. A 6 m.p.h. **speed limit** is enforced on Saturdays, Sundays and holidays.
(191) **Seneca Creek** has depths of 8 feet in the entrance and 5 to 6 feet into the arms. A light marks the shoal on the east side of the entrance. Gasoline, slips, and marine supplies can be obtained along the creek.
(192) **Gunpowder River** is entered through a channel marked by a light and buoys west of **Spry Island Shoal**, in midentrance; the shoal is covered 2 to 4 feet; the river channel had depths of 8 feet for 2 miles; 2 to 9 feet for 4 miles; 3 feet in a channel leading to a creek below Joppatowne with depths of 4 to 7 feet, thence 4 feet in the marina basin at Joppatowne.

# Table of Selected Chart Notes

AREA 1

Fishing traps permitted Oct 2 to May 19 inclusive

HEIGHTS

Heights in feet above Mean High Water.

Corrected through NM Dec. 15/07
Corrected through LNM Dec. 11/07

Mercator Projection
Scale 1:40,000 at Lat. 39° 10'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:


Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

MAGOTHY RIVER

The channel north of Gibson Island is marked by private lights from May 1 to November 1, which are not charted.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SMALL CRAFT WARNINGS

During the boating season small-craft warnings will be displayed from sunrise to sunset on Maryland Marine Police Cruisers while underway in Maryland waters of the Chesapeake Bay and tributaries.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 3 for important supplemental information.

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 5° from the normal variation have been observed in the channel from Pooles Island to Howell Point (chart 12274).

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

| | | |
|---|---|---|
| Baltimore, MD | KEC-83 | 162.40 MHz |
| Sudlersville, MD | WXK-97 | 162.50 MHz |
| Washington, DC (Manassas, VA) | KHB-36 | 162.55 MHz |

For Symbols and Abbreviations see Chart No. 1

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

PLANE COORDINATE GRID

(based on NAD 1927)

The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: -+-
The last three digits are omitted.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOTE C

CAUTION - Unexploded ammunition or ordnance (duds) may exist within the limits of the Restricted Area.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE B

WARNING

Small craft operators in Frog Mortar Creek are advised to use extreme caution in the vicinity of Martin State Airport, Runway 33. Small craft with mast exceeding 37 feet in height above the waterline may create an obstruction with aircraft using the airport.

NOTE D

WARNING

Small-craft operators are advised to use extreme caution in the vicinity of SEVEN-FOOT KNOLL LIGHT. Waves to twelve feet have been reported generated by larger vessels transiting the adjacent channels.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Baltimore, Maryland.

Refer to charted regulation section numbers.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

Additional information can be obtained at nauticalcharts.noaa.gov.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: ——— — ——— —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

TIDAL INFORMATION

| PLACE NAME | (LAT/LONG) | Height referred to datum of soundings (MLLW) Mean Higher High Water | Mean High Water | Mean Low Water |
|---|---|---|---|---|
| | | feet | feet | feet |
| Love Point | (39°02'N/76°18'W) | 1.7 | 1.4 | 0.2 |
| Baltimore, Ft. McHenry | (39°16'N/76°35'W) | 1.7 | 1.4 | 0.2 |

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Oct 2007)

CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF APR 2009

| NAME OF CHANNEL | * SEE FOOTNOTE LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | PROJECT DIMENSIONS WIDTH (FEET) | LENGTH * (MILES) | DEPTH * (FEET) |
|---|---|---|---|---|---|---|---|
| 3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND | 35.2 | 37.9 | 36.2 | 3-09 | 400 | 1.68 | 35 |
| SOUTH END OF POOLES ISLAND TO WORTON POINT | 34.1 | 32.8 | 30.5 | 3-09 | 400 | 4.16 | 35 |
| WORTON POINT TO HOWELL POINT | 34.2 | 34.3 | 32.3 | 3-09 | 400 | 4.84 | 35 |

* CONTROLLING CHANNEL DEPTHS IN FEET AT LOCAL MEAN LOWER LOW WATER ENTERING FROM CHESAPEAKE BAY.
PROJECT LENGTHS IN NAUTICAL MILES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CURTIS BAY AND CREEK CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2008

| NAME OF CHANNEL | CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | PROJECT DIMENSIONS WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
|---|---|---|---|---|---|---|---|
| CURTIS CREEK | | | | | | | |
| LOWER REACH | 36.0 | 35.6 | 36.2 | 8-08 | 200 | 0.54 | 35 |
| MIDDLE REACH | 19.6 | 20.6 | 18.4 | 8-08 | 200-380 | 1.09 | 22 |
| UPPER REACH | 17.1 | 16.7 | A14.8 | 8-08 | 200-100 | 0.55 | 22 |

A. EXCEPT FOR SHOALING TO 12.5 FT AT 39° 11' 42.9" N 76° 34' 10.2" W
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

BALTIMORE HARBOR CHANNEL DEPTHS

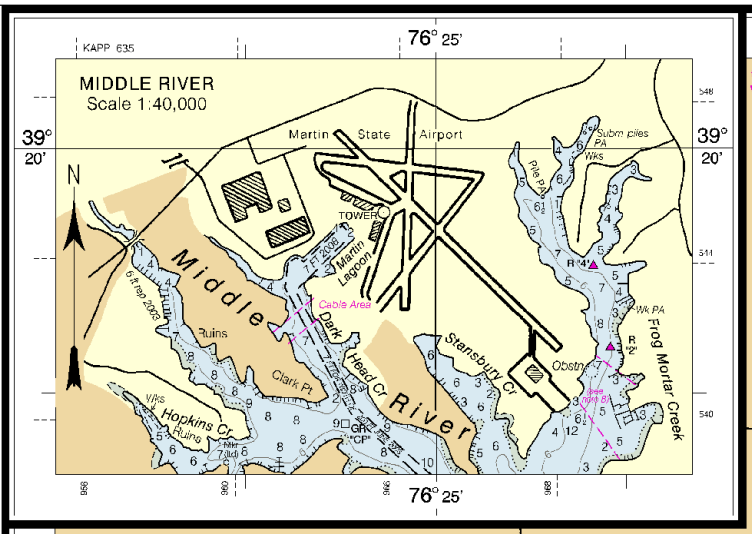
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2009

| NAME OF CHANNEL | CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | PROJECT DIMENSIONS WIDTH (FEET) | LENGTH (MILES) | DEPTH MLLW (FEET) |
|---|---|---|---|---|---|---|---|---|
| CRAIGHILL ENTRANCE | 47.0 | 51.0 | 51.0 | 49.0 | 3-09 | 700 | 3.79 | 50 |
| CRAIGHILL CHANNEL | 49.0 | 51.0 | 51.0 | 47.0 | 4-09 | 700 | 3.24 | 50 |
| CRAIGHILL ANGLE | 47.0 | 50.0 | 50.0 | 48.0 | 5,7-09 | 700-1870 | 1.88 | 50 |
| CRAIGHILL CHANNEL UPPER RANGE | 51.0 | 50.0 | 51.0 | 51.0 | 5-09 | 700 | 1.19 | 50 |
| CUTOFF ANGLE | 50.0 | 51.0 | 49.0 | 49.0 | 3-09 | 700-1740 | 1.14 | 50 |
| BREWERTON CHANNEL | 51.0 | 51.0 | 51.0 | 50.0 | 4-09 | 700 | 3.50 | 50 |
| BREWERTON ANGLE | 48.8 | 50.5 | 50.0 | 49.5 | 1-09 | 700-1460 | 1.10 | 50 |
| FORT MCHENRY CHANNEL | 48.4 | 50.3 | 50.5 | 49.7 | 1-09 | 700 | 3.87 | 50 |
| FORT MCHENRY CHANNEL TURNING BASIN | 50.5 | 50.8 | 51.1 | 49.9 | 1-09 | 1200 | 0.23 | 50 |
| CURTIS BAY CHANNEL | 50.0 | 49.0 | 48.0 | 49.0 | 3-09 | 400-1275 | 2.25 | 50 |
| BREWERTON CHANNEL EASTERN EXTENSION | 32.9 | 35.6 | 35.4 | 31.8 | 5-08 | 600 | 6.33 | 35 |
| SWAN POINT CHANNEL | 35.0 | 35.0 | 35.0 | 35.0 | 6-09 | 600 | 3.13 | 35 |
| TOLCHESTER CHANNEL | 31.0 | 35.0 | 36.0 | 35.0 | 6-09 | 450-600 | 10.87 | 35 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.




SOUNDINGS IN FEET

SCALE 1:40,000
Nautical Miles
Yards

Baltimore Cemetery
Orangeville
Patterson Park
Highlandtown
BALTIMORE
Canton
Sparrows Pt Jct
Mt Clare
Stadium
Gwynns Falls
Mt Winans
Westport
Lakeland
Clifford
Baltimore Highlands
Patapsco River
Brooklyn
Masonville
Fairfield
Curtis Bay
Ft McHenry
NORTH LOCUST PT MARINE TERMINAL
SOUTH LOCUST PT MARINE TERMINAL
Iso G 6s 41ft
Iso R 10s 13ft
Lazaretto Pt
Tunnel
Colgate Cr
SEAGIRT MARINE TERMINAL
(use chart 12281)
FORT McHENRY CHANNEL
CURTIS BAY CHANNEL
CURTIS BAY
Stonehouse Cove
Fishing Pt
Spoil Area
Pipeline Area
DEAD SHIP ANCHORAGE
110.1/58 (see note A)
Thomas Cove
Leading Pt
Hawkins Pt
SILOS
Cabin Br
Walnut Pt
Cable and Pipeline Area
FIXED BRIDGE HOR CL 77 FT VERT CL 8 FT
BASCULE BRIDGES HOR CL 200 FT VERT CL 40 FT
OVHD PWR CABS
STACK
SPIRE
TANK
TOWER
Hosp
R TR
Oc G 4s 50ft
F G 82ft
F G 98ft

Joins page 8



North

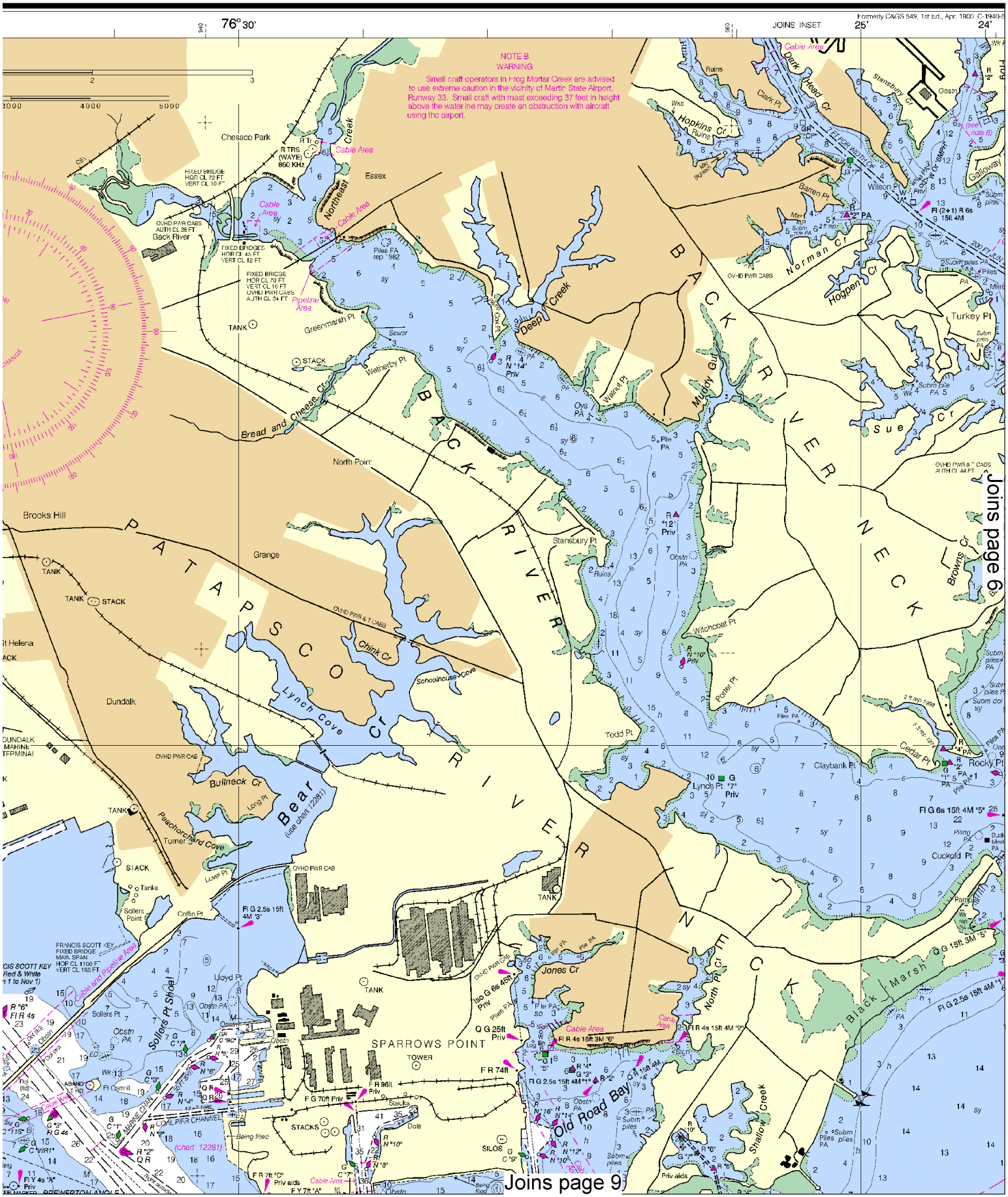
Printed at reduced scale. ~~SCALE 1:40,000~~ Nautical Miles

See Note on page 5.

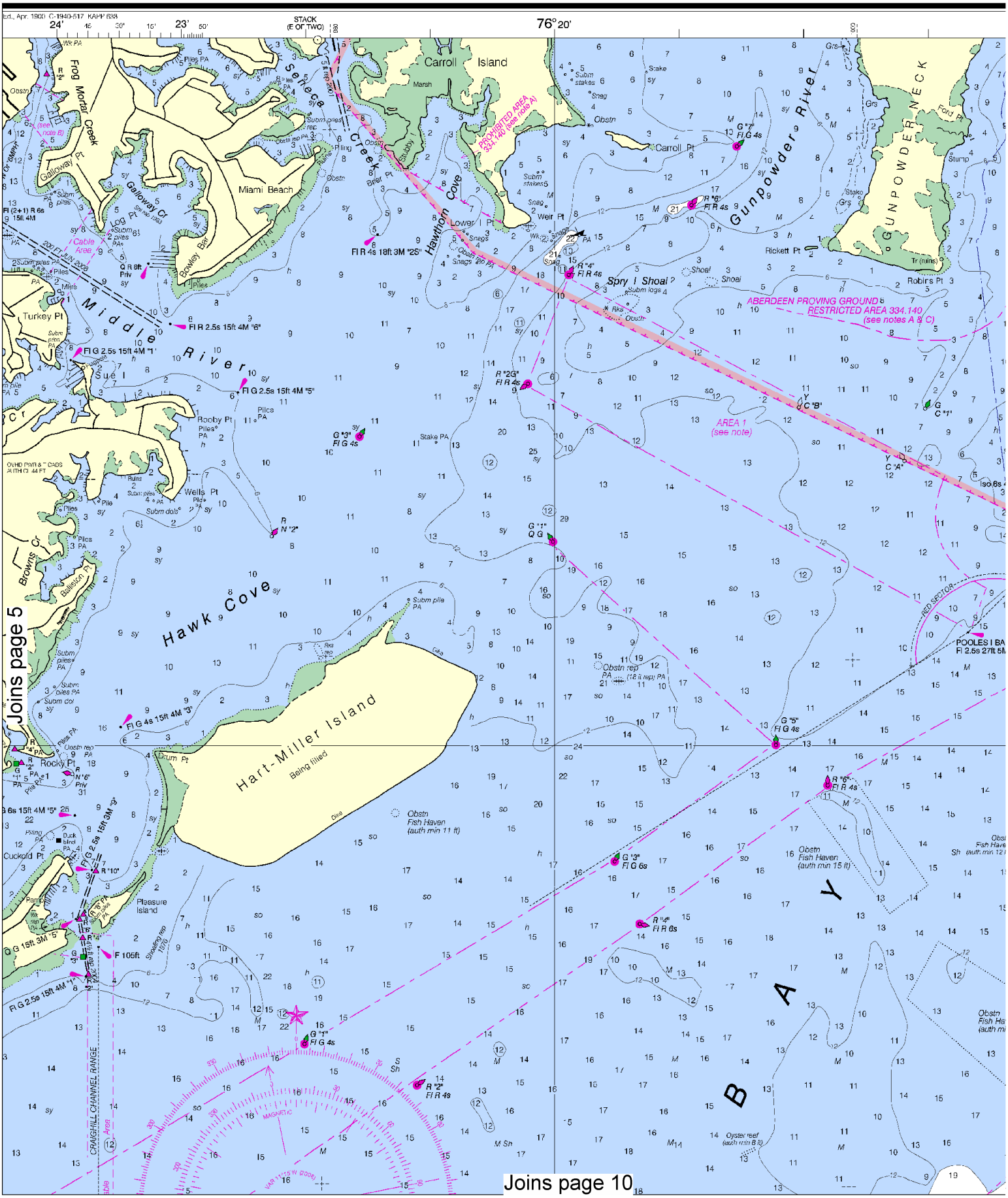
1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000




This BookletChart was reduced to 70% of the original chart scale.
The new scale is 1:57143. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.




6

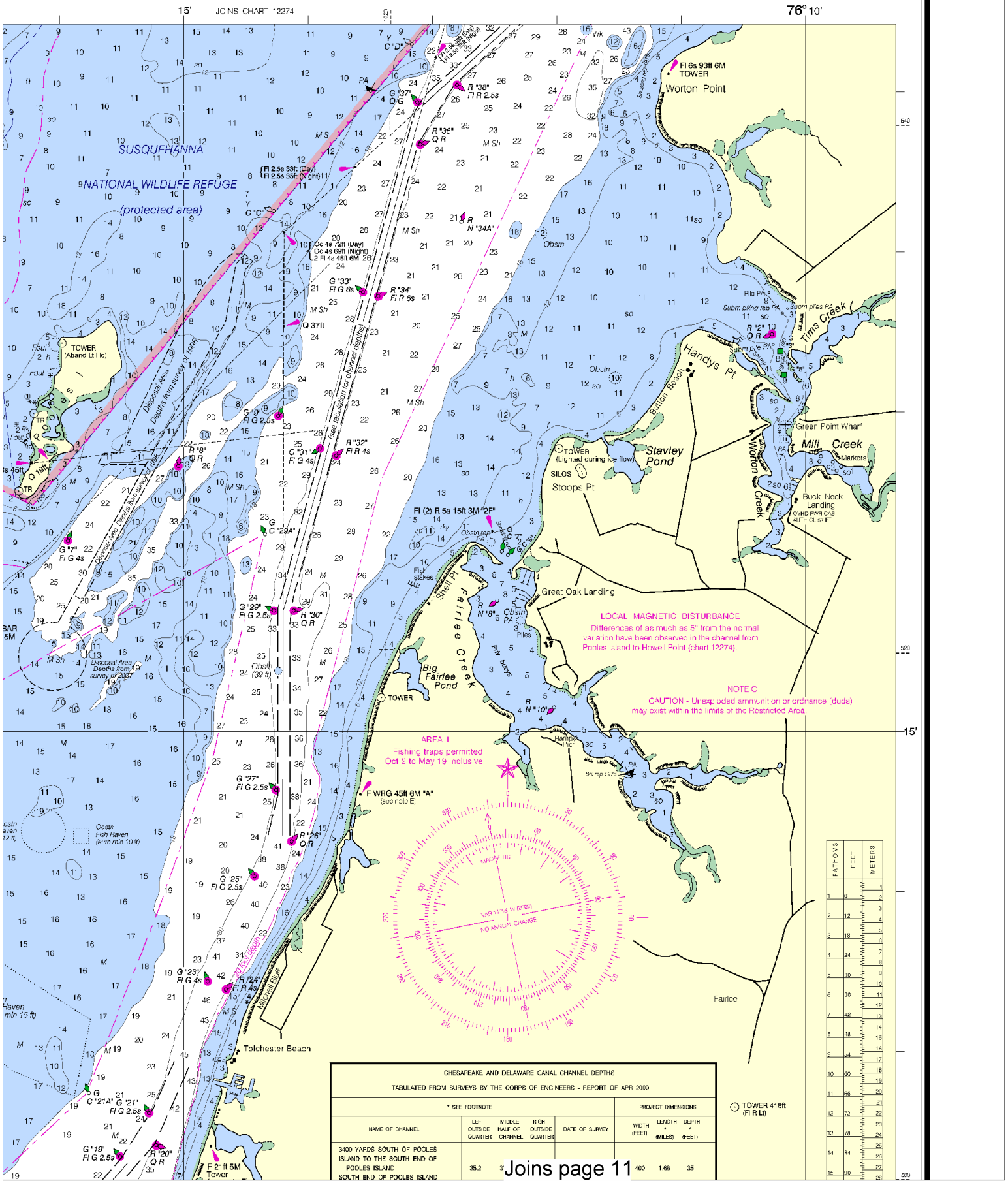
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles 1 ½ 0 1 2 3

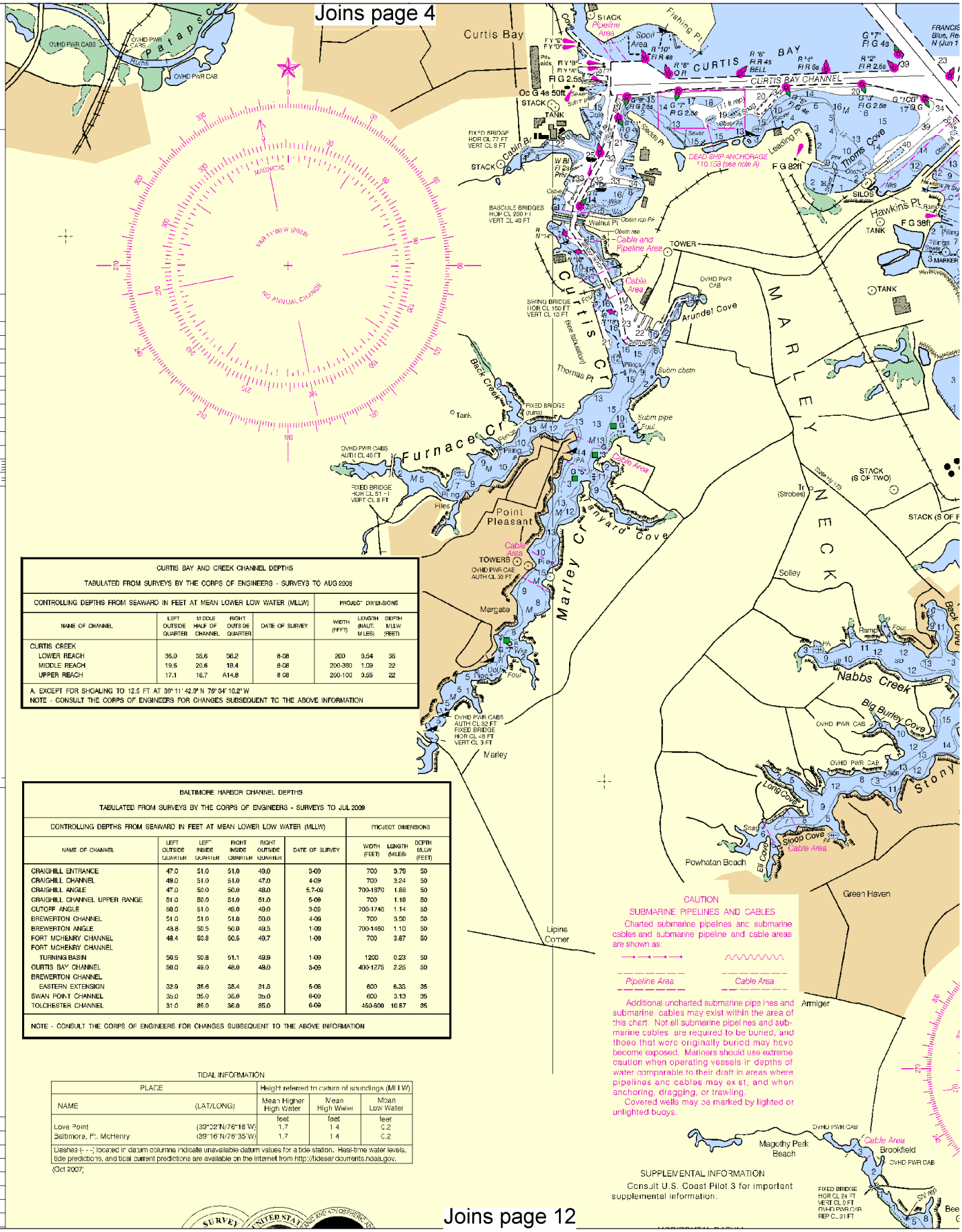
Yards 1000 0 1000 2000 3000 4000 5000

See Note on page 5.




Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0810 2/23/2010,
NGA Weekly Notice to Mariners: 1010 3/6/2010,
Canadian Coast Guard Notice to Mariners: n/a .




CURTIS BAY AND CREEK CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2008

| NAME OF CHANNEL | CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | PROJECT DIMENSIONS WIDTH (FEET) | LENGTH (NAUT. MILES) | DEPTH MLLW (FEET) |
|---|---|---|---|---|---|---|---|
| CURTIS CREEK | | | | | | | |
| LOWER REACH | 36.0 | 35.6 | 36.2 | 8-08 | 200 | 0.54 | 35 |
| MIDDLE REACH | 19.5 | 20.6 | 18.4 | 8-08 | 200-380 | 1.09 | 22 |
| UPPER REACH | 17.1 | 16.7 | A14.8 | 8 08 | 200-100 | 0.55 | 22 |

A. EXCEPT FOR SHOALING TO 12.5 FT AT 39° 11' 42.9" N 76° 34' 10.2" W

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

BALTIMORE HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2009

| NAME OF CHANNEL | CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER | LEFT INSIDE QUARTER | RIGHT INSIDE QUARTER | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | PROJECT DIMENSIONS WIDTH (FEET) | LENGTH (MILES) | DEPTH MLLW (FEET) |
|---|---|---|---|---|---|---|---|---|
| CRAIGHILL ENTRANCE | 47.0 | 51.0 | 51.0 | 49.0 | 3-09 | 700 | 3.79 | 50 |
| CRAIGHILL CHANNEL | 49.0 | 51.0 | 51.0 | 47.0 | 4-09 | 700 | 3.24 | 50 |
| CRAIGHILL ANGLE | 47.0 | 50.0 | 50.0 | 48.0 | 5.7-09 | 700-1970 | 1.88 | 50 |
| CRAIGHILL CHANNEL UPPER RANGE | 51.0 | 50.0 | 51.0 | 51.0 | 5-09 | 700 | 1.19 | 50 |
| CUTOFF ANGLE | 50.0 | 51.0 | 49.0 | 49.0 | 3-09 | 700-1740 | 1.14 | 50 |
| BREWERTON CHANNEL | 51.0 | 51.0 | 51.0 | 50.0 | 4-09 | 700 | 3.50 | 50 |
| BREWERTON ANGLE | 48.8 | 50.5 | 50.0 | 49.5 | 1-09 | 700-1460 | 1.10 | 50 |
| FORT MCHENRY CHANNEL | 48.4 | 50.8 | 50.5 | 49.7 | 1-09 | 700 | 3.87 | 50 |
| FORT MCHENRY CHANNEL TURNING BASIN | 50.5 | 50.8 | 51.1 | 49.9 | 1-09 | 1200 | 0.23 | 50 |
| CURTIS BAY CHANNEL | 50.0 | 49.0 | 48.0 | 49.0 | 3-09 | 400-1275 | 2.25 | 50 |
| BREWERTON CHANNEL EASTERN EXTENSION | 32.9 | 35.6 | 35.4 | 31.8 | 5-08 | 600 | 6.33 | 35 |
| SWAN POINT CHANNEL | 35.0 | 35.0 | 35.0 | 35.0 | 6-09 | 600 | 3.13 | 35 |
| TOLCHESTER CHANNEL | 31.0 | 35.0 | 36.0 | 35.0 | 6-09 | 450-600 | 10.87 | 35 |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

TIDAL INFORMATION

| PLACE NAME | (LAT/LONG) | Height referred to datum of soundings (MLLW) Mean Higher High Water | Mean High Water | Mean Low Water |
|---|---|---|---|---|
| | | feet | feet | feet |
| Love Point | (39°32'N/76°18'W) | 1.7 | 1.4 | 0.2 |
| Baltimore, Ft. McHenry | (39°16'N/76°35'W) | 1.7 | 1.4 | 0.2 |

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov. (Oct 2007)

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area

Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 3 for important supplemental information.

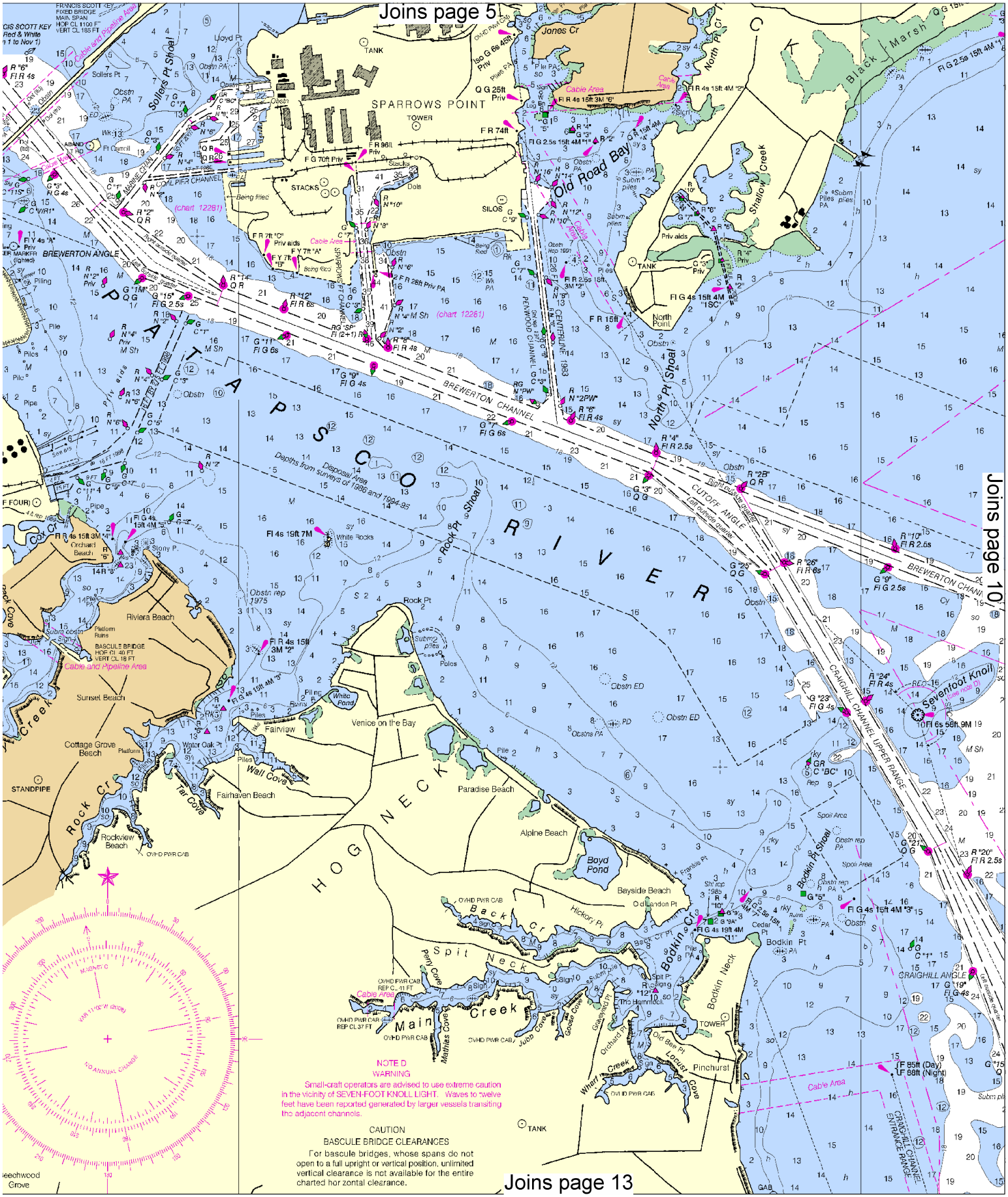


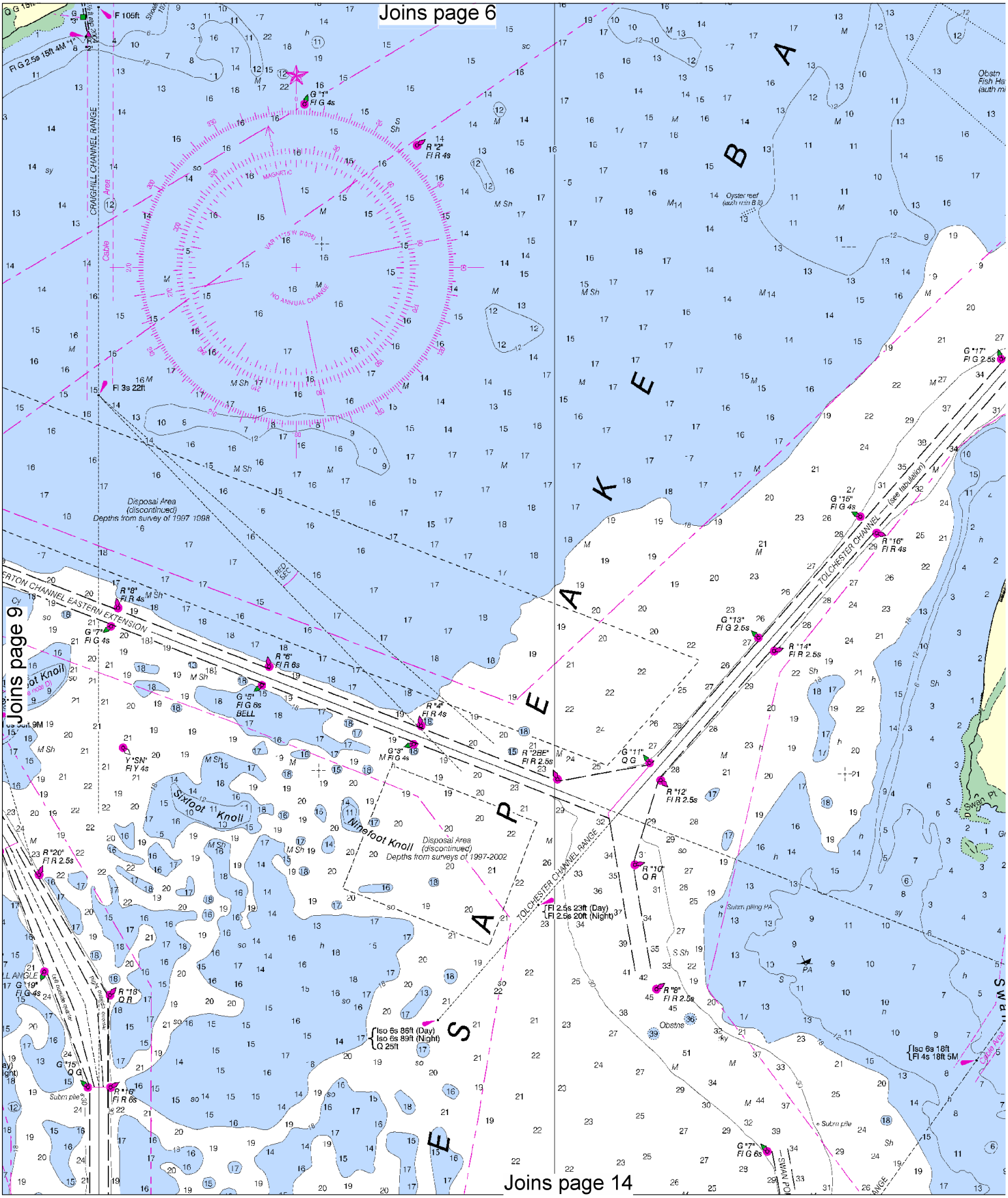
North

Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000


Joins page 5
Joins page 10
Joins page 13
SPARROWS POINT
TANK
TOWER
STACKS
SILOS
Jones Cr
North Pt Cr
Black Marsh
Old Road Bay
Shallow Creek
North Point
North Pt Shoal
PATAPSCO RIVER
BREWERTON CHANNEL
CUTOFF ANGLE
CRAIGHILL CHANNEL UPPER RANGE
CRAIGHILL ANGLE
CRAIGHILL CHANNEL ENTRANCE RANGE
Seventeet Knoll
Rock Pt Shoal
Soilers Pt Shoal
Soilers Pt
Lloyd Pt
Rock Cr
Riviera Beach
Sunset Beach
Cottage Grove Beach
Fairview
Venice on the Bay
Wall Cove
Tar Cove
Fairhaven Beach
Rockview Beach
Paradise Beach
Alpine Beach
Boyd Pond
Bayside Beach
Old London Pt
Hickory Pt
Back Cr
Bodkin Cr
Bodkin Pt
Bodkin Neck
Spit Neck
Main Creek
Perry Cove
Mathias Cove
Goose Cove
Jubb Cove
Graveyard Pt
Orchard Pt
Old Bee Pt
Locust Cove
Wharf Creek
Pinchurst
Hog Neck
Rock Pt
White Rocks
Orchard Beach
Stony P.
Water Oak Pt
Beechwood Grove
STANDPIPE
Cable and Pipeline Area
Disposal Area
Depths from surveys of 1986 and 1994-95
NOTE D
WARNING
Small-craft operators are advised to use extreme caution in the vicinity of SEVEN-FOOT KNOLL LIGHT. Waves to twelve feet have been reported generated by larger vessels transiting the adjacent channels.
CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.




10

North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 7

CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF APR 2009

| NAME OF CHANNEL | * SEE FOOTNOTE: LEFT OUTSIDE QUARTER | MIDDLE HALF OF CHANNEL | RIGHT OUTSIDE QUARTER | DATE OF SURVEY | PROJECT DIMENSIONS: WIDTH (FEET) | LENGTH (MILES) | DEPTH (Feet) |
|---|---|---|---|---|---|---|---|
| 3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND | 35.2 | 37.9 | 38.2 | 3-09 | 400 | 1.68 | 35 |
| SOUTH END OF POOLES ISLAND TO WORTON POINT | 34.1 | 32.8 | 30.5 | 3-09 | 400 | 4.16 | 35 |
| WORTON POINT TO HOWELL POINT | 34.2 | 34.3 | 32.3 | 3-09 | 400 | 4.84 | 35 |

* CONTROLLING CHANNEL DEPTHS IN FEET AT LOCAL MEAN LOWER LOW WATER ENTERING FROM CHESAPEAKE BAY. PROJECT LENGTHS IN NAUTICAL MILES.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

SCALE 1:40,000

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

NOTE E

Tolchester Sector Light A is equipped with a fixed light divided into sectors as follows:

Light A, red sector - from 001.5° to 046°; white sector - from 046° to 047.5°; red sector - from 047.5° to 087.5°; white sector - from 087.5° to 090.5°; green sector - from 090.5° to 187°; obscured - from 187° to 001.5°.

Tolchester Directional Light is equipped with a fixed white light down the channel centerline, visible only from 041.5° to 046.5°.

Tolchester Beach

Fairlee

TOWER 418ft (Fl R Lt)

F 21ft 5M Tower (see note E)

SILOS (CENTER OF TWO)

Poplar Neck

Shipyard Cr

Millstone Pt

Sinai Cove

Walnut Pt

Fox Pt

West Fork

BROAD NECK

Lovely Cove

Bungay Cr

Dam

Whale Pt

Pastor Pt

Graveyard Cove

Eagle Pt

Long Cove

Horner Cove

Cedar Pt

Island Pt

Cacaway I

Tavern Creek

Swan Creek

Deep Log

The Haven

TANK Graduate

Rock Hall

Rock Hall Harbor (use chart 12272)

TANK

Windmill Pt

Cable Area

Fl R 2.5s 15ft 3M "4"

Deadman Pt

GRAIN ELEVATOR (EAST OF FOUR)

Huntingfield Pt

Huntingfield Cr

Swan Point Bar

New Yarmouth

Cherry Tree Pt

Skinners Neck

Sycamore Pt

Hills Pt

Pier Ramp

Grays Inn Cr

F 110ft

Herring Cr

Jerrys Cr

Browns Pt

Stoney Pt

PINEY NECK

Creek

Davis Cr

Orchard Pt

LOOKOUT TR

McKinleyville

Crosby

Lawyers Cove

Drum Pt

Long Cove

QUAKER NECK

SILO (S'LY OF TWO)

39° 10'

Joins page 15

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BREWERTON CHANNEL | | | | | 5 | | | |
| EASTERN EXTENSION | 32.9 | 35.6 | 35.4 | 31.8 | 6-28 | 600 | 3.13 | 35 |
| SWAN POINT CHANNEL | 35.0 | 35.0 | 35.0 | 35.0 | 6-09 | 450-600 | 10.67 | 35 |
| TOLCHESTER CHANNEL | 31.0 | 35.0 | 36.0 | 35.0 | | | | |

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Joins page 8

TIDAL INFORMATION

| PLACE | | Height referred to datum of soundings (MLLW) | | |
|---|---|---|---|---|
| NAME | (LAT/LONG) | Mean Higher High Water | Mean High Water | Mean Low Water |
| | | feet | feet | feet |
| Love Point | (39°32'N/76°18'W) | 1.7 | 1.4 | 0.2 |
| Baltimore, Ft. McHenry | (39°16'N/76°35'W) | 1.7 | 1.4 | 0.2 |

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.
(Oct 2007)

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

MARYLAND

# CHESAPEAKE BAY

## APPROACHES TO

## BALTIMORE HARBOR

Mercator Projection
Scale 1:40,000 at Lat. 39° 10'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

For Symbols and Abbreviations see Chart No. 1

Additional information can be obtained at nauticalcharts.noaa.gov.

PLANE COORDINATE GRID
(based on NAD 1927)

The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: -|- The last three digits are omitted.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: — — — —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

*Pipeline Area* *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 3 for important supplemental information.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.392" northward and 1.140" eastward to agree with this chart.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Baltimore, Maryland.

Refer to charted regulation section numbers

HEIGHTS

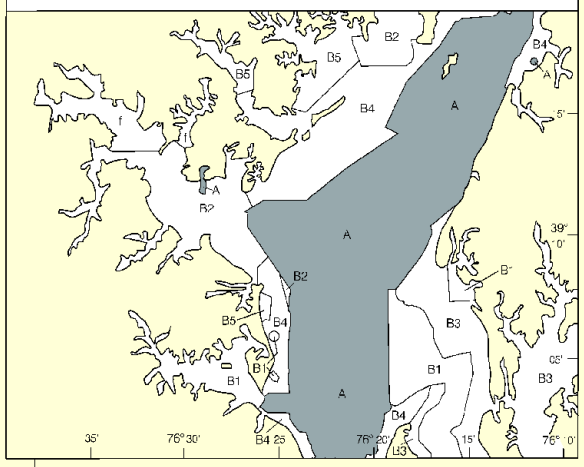
Heights in feet above Mean High Water.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

| | | | |
|---|---|---|---|
| A | 1990-2005 | NOS Surveys | full bottom coverage |
| B1 | 1990-1999 | NOS Surveys | partial bottom coverage |
| B2 | 1970-1989 | NOS Surveys | partial bottom coverage |
| B3 | 1940-1969 | NOS Surveys | partial bottom coverage |
| B4 | 1900-1939 | NOS Surveys | partial bottom coverage |
| B5 | Pre-1900 | NOS Surveys | partial bottom coverage |
| f | | Chart 12281 | |




LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20

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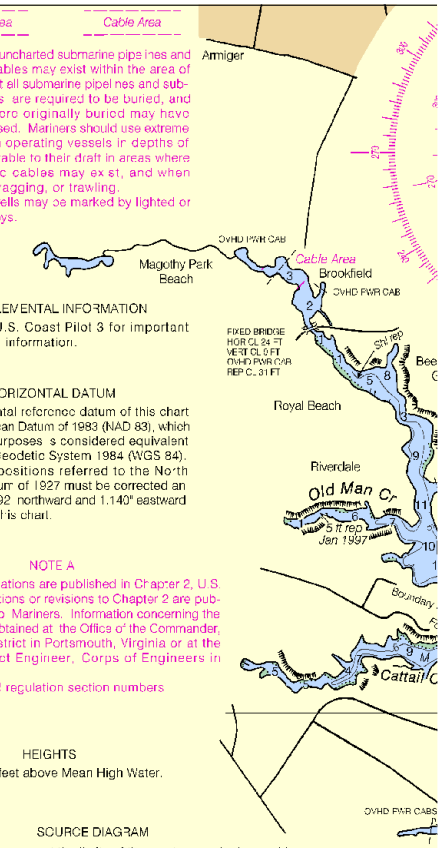





CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to pr
Ocean Service encourages users to submit corr
improving this char; to the Chief, Marine Char
Service, NOAA, Silver Spring, Maryland 20910



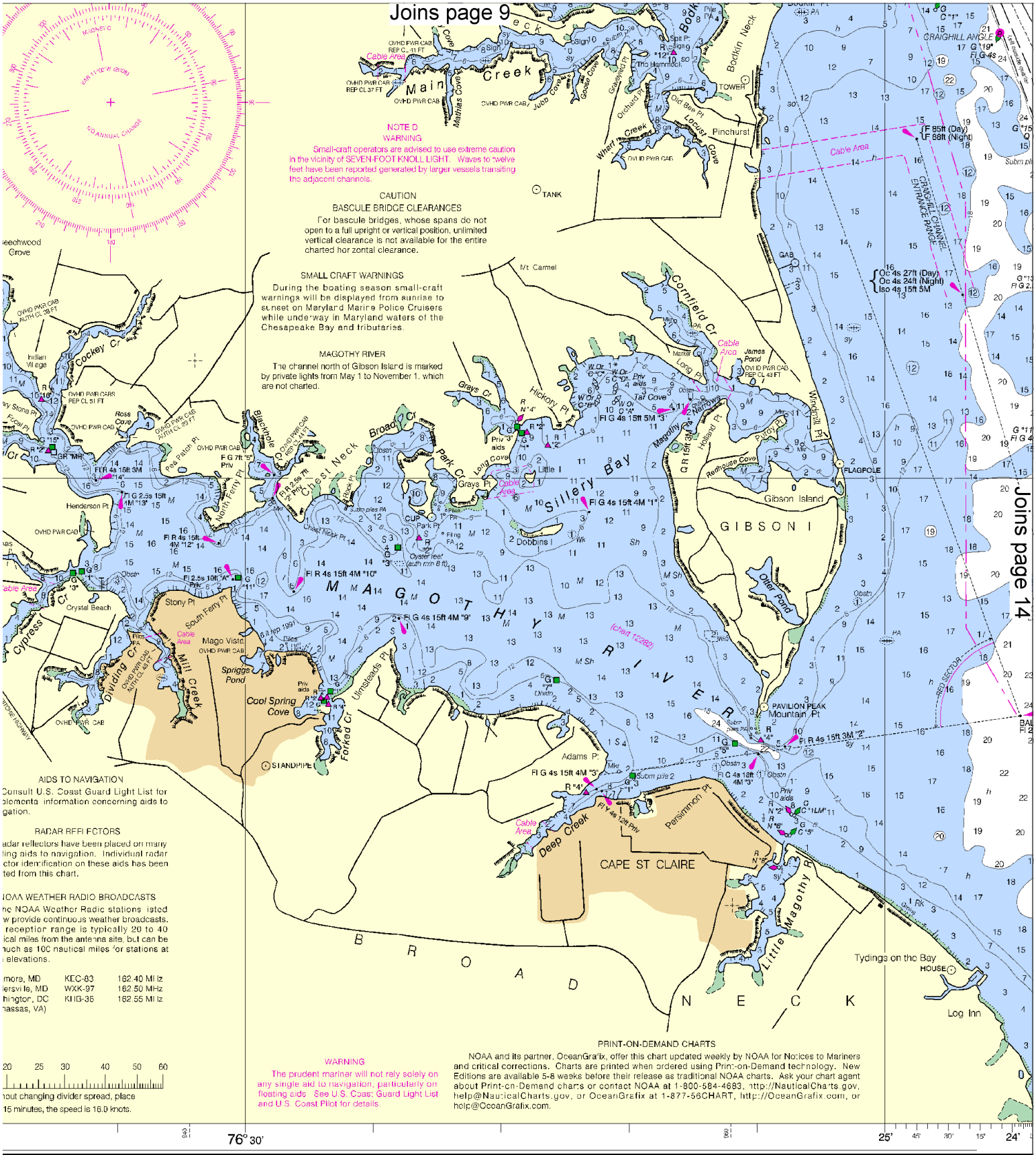
North

Printed at reduced scale. ~~SCALE 1:40,000~~

See Note on page 5.

Nautical Miles
1 ½ 0 1 2 3

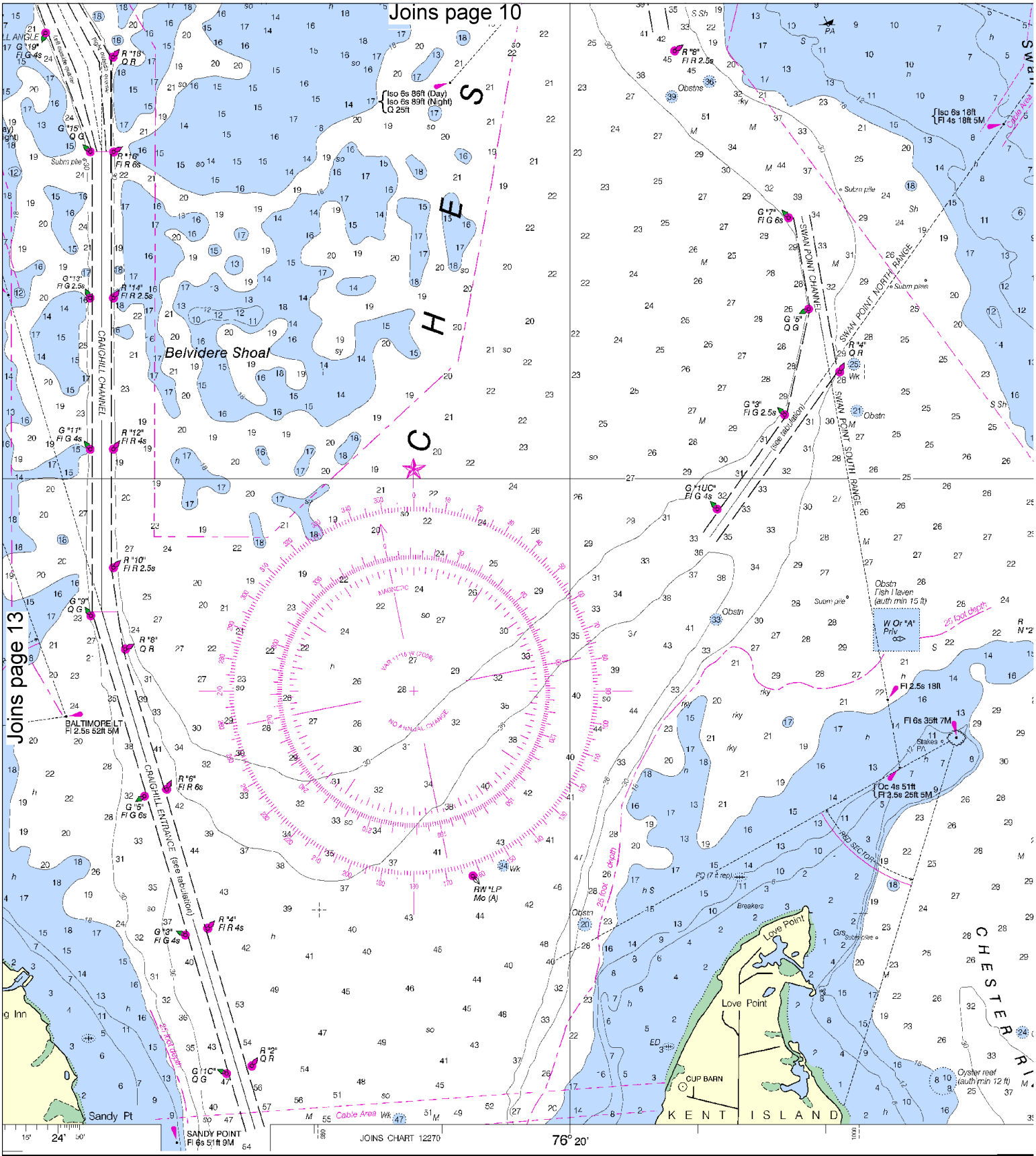
Yards
1000 0 1000 2000 3000 4000 5000




promote safe navigation. The National
orrections, additions, or comments for
art Division (N/CS2), National Ocean
10-3282.

SOUNDINGS IN FEET

Published at Washington, D
U.S. DEPARTMENT OF COM
NATIONAL OCEANIC AND ATMOSPHERIC
NATIONAL OCEAN SERVIC
COAST SURVEY




al Washington, D.C.
MENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
OCEAN SERVICE
AST SURVEY

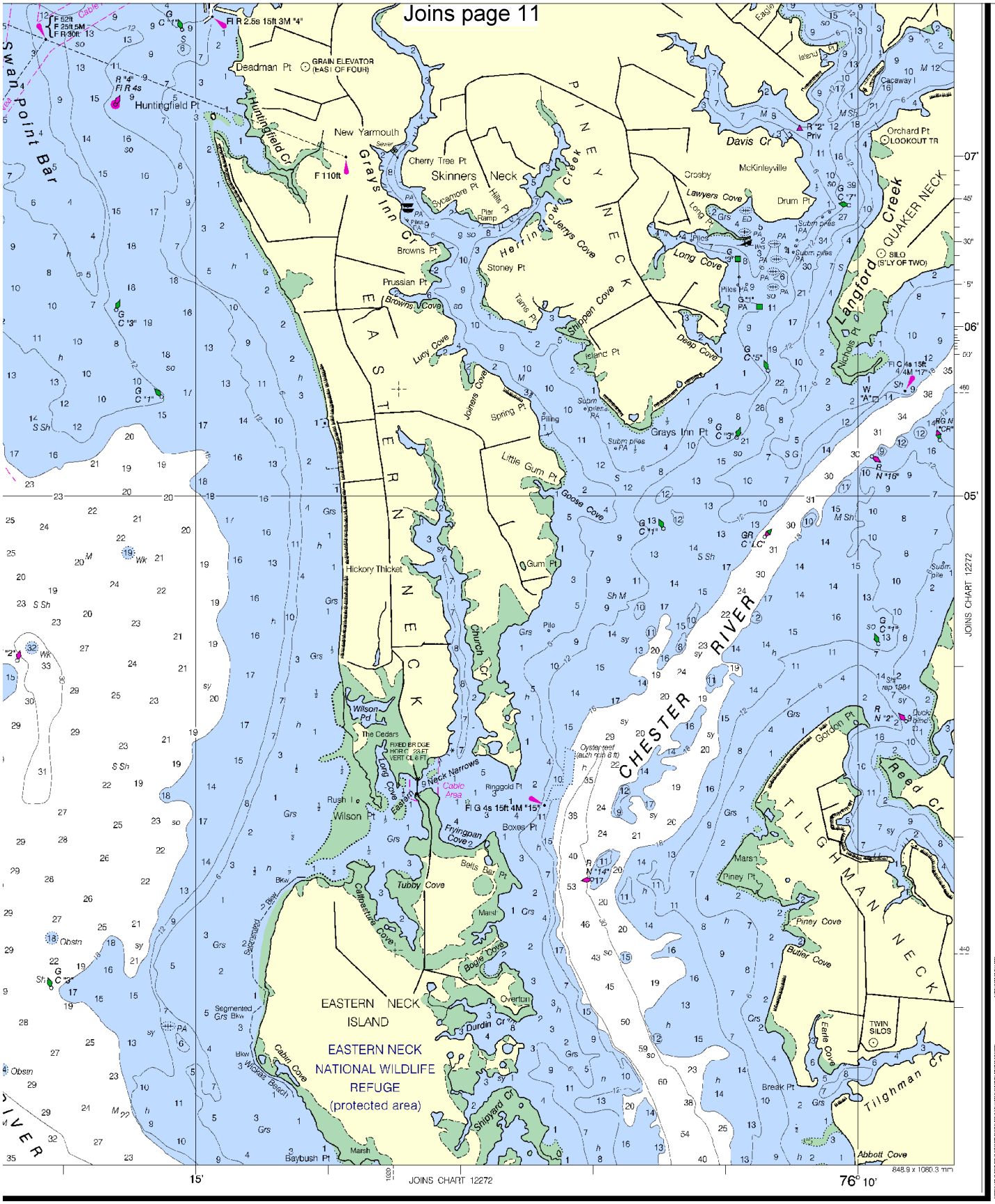


North

Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles
1 ½ 0 1 2 3

Yards
1000 0 1000 2000 3000 4000 5000




Approaches to Baltimore Harbor

SOUNDINGS IN FEET - SCALE 1:40,000

12278


ED NO. 76

NSN 7642014007632 NGA REFERENCE NO. 12AHA12278

# EMERGENCY INFORMATION

**VHF Marine Radio channels for use on the waterways:**

**Channel 6** – Intership safety communications.
**Channel 9** – Communications between boats and ship-to-coast.
**Channel 13** – Navigation purposes at bridges, locks, harbors.
**Channel 16 – Emergency, distress and safety calls** to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
**Channel 22** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
**Channels 68, 69, 71, 72 & 78** – Recreational boat channels.

**Distress Call Procedures**

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

**HAVE ALL PERSONS PUT ON LIFE JACKETS !!**

**Mobile Phones** – Call 911 for water rescue.
**Coast Guard Search & Rescue** – 800-418-7314/410-576-2525
**Coast Guard Stillpond** – 410-778-2201-2202
**Coast Guard Annapolis** – 410-267-8108
**Coast Guard Little Creek** – 757-464-9371/9372
**Maryland Natural Resources Police** – 410-260-8888
**Delaware Marine Police** – 302-736-4580

**NOAA Weather Radio** – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

**Getting and Giving Help** – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

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# NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes, producing over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Electronic Navigational Charts® (ENCs) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at: www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (RNCs) – RNCs are georeferenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at: www.NauticalCharts.NOAA.gov.

Official BookletCharts™ - BookletCharts™ are reduced scale NOAA charts printed in page-sized pieces. The "home edition" can be downloaded from NOAA for free and printed. The "professional edition", containing additional boating, safety, and educational edition is available for NOAA chart agents or over the Internet.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from official NOAA chart agents or downloaded for free at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated each week by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print on Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Chart No. 1, Nautical Chart Symbols – This reference publication depicts basic chart elements and explains nautical chart symbols and abbreviations. Download it for free at: www.NauticalCharts.NOAA.gov.

Coast Survey Navigation Managers – These ambassadors to the maritime community maintain a regional presence for NOAA and help identify the challenges facing marine transportation and boating. They are listed at http://nauticalcharts.noaa.gov/nsd/reps.htm.

Internet sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.


*NOAA, the Nation's Chartmaker*